Department of Transportation Federal Aviation Administration William J. Hughes Technical Center

Laboratory
Management
Division
(ACT-400)



STRATEGIC PLAN

"Planning for continued success in 2000 and beyond"



DECEMBER 1999



Department of Transportation Federal Aviation Administration William J. Hughes Technical Center Laboratory Management



3 December 1999

From Basilyn Bunting, Program Director, and the entire management team of ACT-400

It is with great pleasure that we present the Laboratory Management Division's Strategic Plan for 2000 and beyond. This plan is the roadmap that will guide us to excellence in supporting the aviation community in the 21st century. It has been generated with foremost emphasis on servicing our customer's requirements and the needs of the National Airspace System (NAS), while ensuring the growth and satisfaction of our employees.

We are proud of this plan because it was developed through a deliberative, thoughtful team process that included input from many talented members of this diverse division in concert with our partners, customers, and stakeholders. It truly embodies the character, purpose, and aspirations of our division.

This plan is a living document. We welcome and encourage comments and suggestions on ways to improve upon it. Evolving our plan is important to us, because it will be the essential guiding tool for our division as we go forward into the new millennium . As *the strategic link* in the modernization of the NAS, the safety, security, and efficiency of our nation's air traffic system depends on our continuing growth and success.

The ACT-400 management team is firmly committed to this plan as a means of providing greater benefits to our customers and the flying public, and growth and satisfaction to our employees. Our sincere thanks to those who worked hard to make this much more than just a document, and to all of you who will make it a reality.

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EXECUTIVE SUMMARY

The United States possesses the most advanced and sophisticated air traffic system in the world, safely and efficiently transporting millions of passengers each year via a network of world-wide air traffic facilities. The importance of our aviation system to the U.S. economy cannot be overemphasized. With air travel anticipated to increase dramatically over the next decade, maintaining and enhancing the National Airspace System (NAS) is extremely critical to the economic growth of the country and the aviation community in general.

The NAS is the responsibility of the Federal Aviation Administration (FAA). At the very heart of maintaining and modernizing the NAS is the William J. Hughes Technical Center (WJHTC) and its Laboratory Management Division, ACT-400. This Division, with its unique laboratory facilities and highly skilled personnel, is the nucleus to maintaining and modernizing the NAS.

This Strategic Plan provides the framework for planning within ACT-400 over the next several years. It is intended to bring a sense of cohesion, teamwork, and strategic direction to the planning process. Throughout this plan, our guiding principles remain the NAS, the aviation community, and our personnel.

Our challenge in 2000 and beyond is to succeed in carrying out our Mission:

"To provide innovative solutions to the transition and integration of emerging air traffic technologies while sustaining the safety and efficiency of the existing NAS"

Our goals to meet this challenge place emphasis on our customers, our people, our technology, and our partnerships. Over the next several years, we will strive to

- Enhance Customer Service
- Strengthen the Knowledge and Experience of our Workforce
- Support NAS Modernization Through a Technologically Competitive & Adaptable Laboratory
- Implement Quality Management & Process Improvement
- Foster Partnerships/Relationships with Government, Industry & Academia
- Promote Division Image
- Proactively Manage the Budget Process

We are certain that, through the effective implementation of this plan, we will successfully meet the needs and expectations of the aviation community in the 21st century, and achieve our vision of "continuing to be the strategic link in the modernization of the NAS, providing world class intellectual and physical infrastructure ensuring a safe, secure, and efficient air transportation system."

INTRODUCTION

Modernizing the NAS is paramount to the safe and continued growth of air transportation, requiring cooperation among all parts of the aviation community. The Laboratory Management Division, ACT-400, is a key partner in this NAS modernization effort. This Strategic Plan focuses on the products and services provided by ACT-400; those which aid the successful and efficient modernization the NAS, while complementing the goals and objectives of our partners, including the Department of Transportation (DOT), the Federal Aviation Administration (FAA), its Office of Research and Acquisitions (ARA), and its William J. Hughes Technical Center (WJHTC). This plan is consistent with the requirements of the Government Performance and Results Act (GPRA) of 1993.

BACKGROUND

As the new millennium begins, air traffic volume is projected to increase at a record pace, placing extreme pressures on the existing NAS. To maintain the quality air transportation system that the flying public expects and deserves, enhancing and modernizing the NAS is extremely important, and the greatest challenge facing the Federal Aviation Administration today. At the very foundation of this enormous effort is the FAA's Laboratory Management Division, ACT-400, whose laboratories provide an array of test beds for the performance of research, development, test, transition and integration (T&I), and support of the operational air traffic control system. Known as the NAS Laboratories, these facilities and their expert staff are the strategic link from the conceptual design stages through to field implementation of the new and enhanced emerging airspace system technologies.

Housed at the WJHTC, Atlantic City Int'l Airport, the NAS Laboratories encompass over 100 air traffic control systems configured in a working environment conducive to the enhancement and advancement of the air traffic control system. In addition to a Customer Service Center which provides the focal point for coordinating and responding to customer service requests, the primary functions of ACT-400 include laboratory planning, design, development, implementation, and maintenance.

With a staff of dedicated professionals having more than 1200 combined years of air traffic experience, ACT-400 is the cornerstone to sustaining, enhancing and modernizing the NAS. This unique combination of facilities and professional talent, housed in a central facility, provides dedicated solutions to tomorrow's complex air traffic problems.

Laboratory Management Division ACT-400 Mission, Vision, Values

The FAA's Capital Investment Plan calls for the replacement of aging and legacy air traffic systems with new and emerging, state-of-the-art technology. ACT-400 plays a vital role in sustaining the current NAS while providing a seamless transition and integration (T&I) of new and emerging technologies into the operational air traffic control system. The following *Mission*, *Vision*, *and Values* statements of ACT-400 reflect our commitment to our people, the aviation community, and to reshaping the air transportation system.



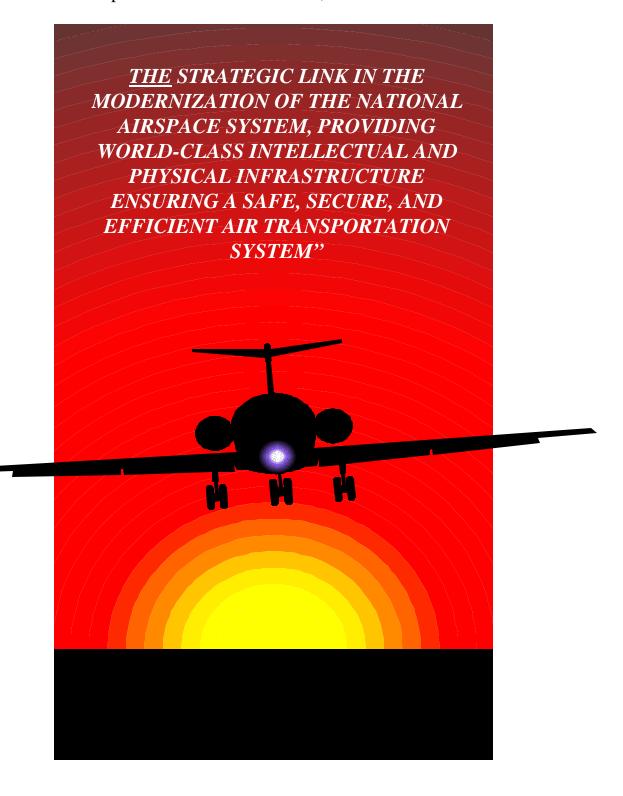
OUR MISSION

A key partner in supporting and modernizing the National Airspace System, our mission is . . .

TO PROVIDE INNOVATIVE **SOLUTIONS TO THE** TRANSITION AND INTEGRATION OF EMERGING AIR TRAFFIC TECHNOLOGIES . . . WHILE SUSTAINING THE SAFETY AND EFFICIENCY OF THE EXISTING NAS

OUR VISION

With dedicated professionals and teamwork, we are and will continue to be . . .



OUR VALUES

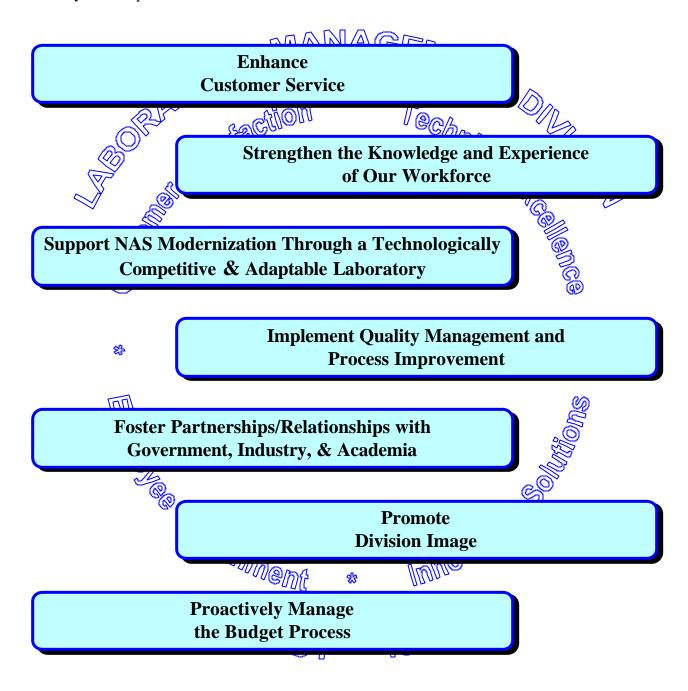
We value

- *Our personnel*, and foster a teamwork environment that recognizes employee contributions, promotes high morale, integrity, professional development, and the free flow of information, and challenges creativity.
- *Our customer(s)*, and ensure that the relationship will be professional, friendly, and reflect the highest ethical standards.
- Our customer(s), and foster an environment of confidence to ensure that their objectives will be achieved with quality and excellence.
- Our commitment to the civil aviation community, and ensure that our objectives are in agreement with the national goals.
- ♦ *Effective management*, to achieve quality, excellence and cultural diversity.



OUR GOALS & STRATEGIES

Maximizing the division's response to the aviation community necessitates the proper mix of personnel and technology, and the appropriate support of and partnership with our customers as well as other government and private sector entities. It requires a thorough understanding of the requirements of the NAS, and the ability to make a timely response to often unpredictable needs. It necessitates exploiting emerging technologies and acquiring essential skills, including experienced and committed leadership, to ensure that the division is focused on maximizing the return on its resources. Our goals embody these requirements.



Enhance Customer Service

- **♦** Proactively communicating with our customers
- ♦ Expanding active involvement with Integrated Product Teams (IPT) and other customers to better understand their needs and determine how we can more effectively service them
- **♦ Defining ACT-400's role in Life Cycle Management (LCM)**
- **♦** Developing an Improvement Plan for Life Cycle Maintenance
- ♦ Developing a Customer Service Center (CSC) improvement plan

Strengthen the Knowledge and Experience of our Workforce

- ♦ Enhancing our core competencies in systems knowledge and systems integration
- ◆ Promoting teamwork among employees and a partnership with management
- ♦ Encouraging the sharing of information among our employees, peers, and customers
- **♦** Developing and implementing an effective training program
- ♦ Fostering tolerance for a learning work environment that encourages risk taking
- ♦ Challenging our people to be creative, innovative, and to seize the initiative
- ♦ Providing a comfortable physical work environment
- **♦** Providing all tools necessary for our employees to effectively and efficiently perform their functions

Support NAS Modernization Through a Technologically Competitive & Adaptable Laboratory

- ♦ Sustaining and obtaining all current and future NAS systems
- ♦ Sustaining and obtaining all non-NAS systems necessary to effectively support the NAS
- ♦ Identifying and obtaining all computer platforms necessary to efficiently support NAS software development
- ♦ Maintaining and updating all technical libraries (NAS documentation, media, publications, etc.)
- ♦ Continually refreshing desktop automation and network infrastructures
- **♦** Maintaining and obtaining the infrastructure necessary to allow flexibility of system configurations

Implement Quality Management and Process Improvement

- ♦ Implementing integrated Capability Maturity Modeling (iCMM) policies and procedures
- **♦** Performing an ISO9000 implementation feasibility study
- ♦ Developing and implementing an effective Configuration Management (CM) program

Foster Partnerships/Relationships with Government, Industry, & Academia

- ♦ Identifying sources which are compatible with ACT-400's strategic goals
- ♦ Visiting perspective partners to identify areas of cooperation which will improve the scope and quality of service we provide our customers
- ♦ Participating on FAA decision and review teams (IPT's, NAS Architecture Team, Acquisition Review, etc.)
- **♦** Participating with other Government/industry/academic teams

Promote Division Image

- ♦ Strengthening strategic alliances with other organizations to broaden our capabilities and provide more-efficient "one-stop shopping" to our customers
- ♦ Developing an inventory of our core competencies and evaluating our ability to use these assets to fulfill other FAA and/or Government/industry missions
- ♦ Providing frequent input to the Intercom, newsletters & other administration/department publications
- ♦ Maintaining a presence with our current and potential customers by making frequent visits and briefings
- ♦ Maintaining current divisional communications materials; brochures, flyers, briefing presentations, etc., focusing on capabilities, laboratories, personnel, and success stories
- ♦ Updating and maintaining an interactive website to promote division capabilities, activities, and laboratories, and provide a conduit for customer interaction.
- ♦ Improving visibility within the FAA & DOT, and with local legislators, via press releases
- ◆ Promote our image as the systems experts and systems

Proactively Manage the Budget Process

- ♦ Expanding our role on budget teams (F&E, RED, OPS)
- ♦ Establishing a continuous presence with program decision makers
- **♦** Establishing cost sharing partnerships where appropriate
- **♦** Remaining alert to FAA program changes and future needs